

STUDIES IN THE GESNERIACEAE OF THE OLD WORLD  
XLVI: A SECOND CYRTANDRA ON THE NICOBAR ISLANDS

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ABSTRACT. *Cyrtandra occidentalis* Balakr. & Burtt is described and illustrated from the Nicobar Islands, India.

In a previous paper describing a new *Cyrtandra* from the Nicobar Islands a footnote was added to the effect that a second species was known to occur, but that material was not adequate for description (Balakrishnan in *Notes R.B.G. Edinb.* 35:117, 1976). This second species has now been re-discovered and is described below as *C. occidentalis*, the specific epithet referring to its position at the westernmost point of the range of the genus.

*Cyrtandra occidentalis* belongs to the widespread group that includes the Moluccan *C. decurrens* Vriese (Sect. *Decurrentes* C.B.Cl. quoad typ.): this affinity is indicated by the largish (3 cm) corolla covered on the outside with long golden silky hairs. However it is well distinguished by the small (8–12 mm) free hyaline bracts, pure white almost regular corollas, and rather broad leaves with the petiole sharply marked off from the lamina. It usually grows near streams in dense shaded evergreen forests; it flowers in April–June and fruits in July–August.

*Cyrtandra occidentalis* Balakr. & Burtt, *species nova* a *C. decurrente* Vriese et speciebus affinis bracteis parvis liberis, corollis candidis immaculatis fere regularibus et lamina in petiolum haud decurrente distinguitur. Fig. 1.

Suffrutex 60–100 cm altus; caulis basi decumbens nodis inferioribus radicans, basi 1 cm diametro lignosus, inferne glaber, apicem versus dense appresse pilosus. *Folia* ad apicem caulis, aequalia, elliptico-lanceolata, aequilaterialia ad basin oblique cuneata vel acuta, apice acuta vel acuminata, grosse et distanter serrulata, 16–24 × 5–9 cm, supra pagina parce costa dense pilosa, infra pagina parce nervis dense pilosis; nervi laterales utrinsecus 12–16, subtus prominentes; petioli 3–6 cm longi, pubescentes. *Inflorescentiae* dense multiflorae, cymosae, ex axillis foliorum delapsorum ad basin caulis orientes, dense et appresse aureo-pilosae; pedunculi usque ad 5 mm longi, ramosi; bractae ovato-oblongae vel ovato-lanceolatae, acutae vel subacutae, 8–12 × 3–6 mm, hyalinae, extra parce pilosae, mox caducae; bracteolae parvae, lineares vel ovatae, usque ad 5 mm longae, c. 2 mm latae; pedicelli c. 4 mm longi, crassi, pubescentes. *Calyx* campanulatus, 1.3–1.5 cm longus, extra in costis porcatus, appresse aureo-pilosus; tubus 7–8 mm longus; lobi 5, ovati, apice caudati, 6–7 mm longi. *Corolla* alba, infundibuliformis, leniter bilabiata, 3–3.2 cm longa, ore c. 2 cm lata, extra dense et longe brunneo-villosa, intus glabra; tubus c. 2 cm longus, basi angustatus, medio abrupte ampliatus; lobi 5, rotundati, 1–1.2 cm longi, 6–8 mm lati. *Stamina* 2, inclusa; filamenta

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FIG. 1. *Cyrtandra occidentalis* Balakr. & Burt. A, habit  $\times \frac{1}{2}$ ; B, flower  $\times 1$ ; C, bract  $\times 1$ ; D, bud  $\times 1$ ; E, calyx split open showing disc  $\times 1$ ; F, corolla split open showing stamens  $\times 1$ ; G, anther  $\times 5$ ; H, ovary with style  $\times 1$ ; I, ovary, t.s.  $\times 5$ ; J, fruit  $\times 1$ ; K, seed  $\times 45$ .

c. 1 cm longa, c. 1 cm supra corollae basin orientia, incurva, glabra; antherae c. 2.5 mm longae, apicibus cohaerentes, thecis oblongis longitudinaliter dehiscentibus. *Discus* cupularis, undulatus, 1.5–2 mm crassus, flavo-brunneus. *Ovarium* lineare, album, 7–9 mm longum, c. 2 mm diam.; stylus c. 1.8 cm longus, ad apicem leviter curvatus, puberulus; stigma bilobum, c. 2 mm diam. *Fructus* lineari-ellipsoideus, leviter curvatus, apice anguste obtusus, 2.4–2.6 cm longus, 5–6 mm diam., rugosus, roseo-viridis, calyce persistente. *Semina* numerosa, ellipsoidea, 0.3 mm longa, rubro-brunnea.

Type. India, Great Nicobar Island. Campbell Bay to Chengappa Bay, c. 25 m, 11 vi 1977, in flower, *Balakrishnan* 5700A (holo. CAL); 5700 B–C (iso. PBL); 5700D (iso. E).

INDIA, GREAT NICOBAR ISLAND: on path to Shompen Village, 36.8 km on East-West Road, c. 75 m, 17 vi 1977, in flower, *Balakrishnan* 5825 (CAL, E, PBL); *ibidem*, 23 vii 1976, in fruit, *Balakrishnan* 3984 (CAL, E, PBL); Galathea riverside, 25 km on East-West road, c. 75 m, 16 vi 1977, *Balakrishnan* 5793 (CAL, PBL); Great Nicobar Hill, iv 1905, *Ahmad Ali* 3 (CAL, E).



## TWO BORNEAN RHODODENDRONS

P. J. B. Woods

**ABSTRACT.** A new species of *Rhododendron* (Ericaceae), *R. burttii* P. Woods, is described and comments given on *R. nervulosum* Sleum. var. *exuberans* Sleum. Both taxa are from Sarawak and are illustrated. A relationship is suggested between *R. nervulosum* and *R. stenophyllum* Hook. f.

***Rhododendron burttii* P. Woods, species nova, insignis e serie *Buxifoliarum*, nulli arcte affinis. Fig. 1, a-d.**

Frutex terrestris, c. 0.5 m altus; rami decumbentes internodiis 4(-6-10) cm longis, ultimis puberulis, ad partes novellas parce lepidotis. *Folia* in pseudoverticillis 5-9-meris; lamina coriacea  $\pm$  convexa, oblanceolata, apice obtusa, basi cuneata, 2.2-5(-3.8)  $\times$  (0.9-1.0(-1.3) cm, superne atrovirens, nitida, initio laxa lepidota, deinde glabrescens, subtus pallidior (in sicco pallide ferruginea), nervis lateralibus obscuris, parce lepidota (squamis sessilibus leviter impressis margine lata irregulariter dentata); petioli 2-3 mm longi, parce puberuli et lepidoti, pilis secus costam breviter excurrentibus. *Flores* 1-2(-4), nutantes; perulae anguste ovato-acuminatae, ad 6  $\times$  2 mm, superne sericeae, margine lepidoto-ciliatae; bracteolae filiformes, c. 1 cm longae, ciliatae. *Pedicelli* (1)-2-2.5 cm longi, purpurascens, parce albo-pilosi. *Calyx* membranaceus indistincte lobatus, margine ciliatus, ad 4 mm diam. *Corolla* tubulosa-campanulata, tota 2.5-2.8 cm longa, punicea, extra albo-pilosa, intus ad basin pubescens, tubo c. 1.5 cm longo 5 mm diam., ad basin dilatato (c. 7 mm diam.), lobis patentibus c. 10  $\times$  6 mm, oblongo-ellipticis, obtusis. *Stamina* 10, e corollae tubo paullo exserta; filamenta c. 18 mm longa, sursum attenuata, in parte quarta inferiore pubescentia; antherae oblongae, c. 1.5  $\times$  1 mm. *Discus* glaber. *Ovarium* oblongum, 3-4  $\times$  2 mm, dense pilosum, pilis squamas abscondentibus; stylus ex ovario subabruptus, ad anthesin c. 18 mm longus, in dimidio inferiore laxe pilosus; stigma 1 mm diametro, grosse verrucosum. *Capsula* cylindrica, pilosa et lepidota, 11-18  $\times$  c. 6 mm.

Type. Sarawak. Fifth Division: route from Bakelalan to Gunong Murud, near helicopter pad on ridge above Long Rapata, c. 1500 m, undershrub in forest, collected only as live material, 16 x 1967, *Burt & Martin* B.5549, cult. in hort. bot. reg. Edinb., iv 1970, C.6461 (holo. E; iso. L, SAR).

*R. burttii* has no obvious affinity with any other Malesian species. In Sleumer's account of *Rhododendron* in *Flora Malesiana* ser. 1, 6(4): 580 (1966), it keys out to *R. frey-wisslingii*, a Sumatran species which differs in its shorter (1.4-1.6 cm), broadly tubular-campanulate, lepidote corolla.

The species is named after Mr B. L. Burt whose introductions of Malesian plants have made a significant contribution to the rich collections of Ericaceae in cultivation at Edinburgh and whose advice and friendship over the years I wish to acknowledge.



FIG. 1. a-d, *Rhododendron burtii*: a, habit  $\times c. \frac{1}{2}$ ; b, flower  $\times 1$ ; c, gynoecium  $\times 1$ ; d, stamen  $\times 1$ . e-i, *R. nervulosum* var. *exuberans*: e, habit  $\times c. \frac{1}{2}$ ; f, leaf  $\times \frac{1}{2}$ ; g, gynoecium  $\times 1\frac{1}{2}$ ; h, stamen  $\times 1\frac{1}{2}$ ; i, capsule  $\times 1\frac{1}{2}$ . (e, f & i from *Argent* 823, g & h from *Burt* C7261).

*Rhododendron nervulosum* Sleum. var. *exuberans* Sleum. in *Blumea* 12:113 (1963). Fig. 1, e-i.

Type. Sarawak, Gunong Mulu, 1430 m, 30 vi 1961, *Anderson SAR 4596*, (holo. L; iso. K!, SAR).

SARAWAK. Fourth Division: Gunong Mulu, west ridge near camp iv, c. 4° 03' N, 114° 54' E, c. 1800 m, 24 x 1977, Royal Geographical Society Expedition, *Argent et al.* 823 (E, SAR); Fifth Division: route from Bakelalan to Gunong Murud, above camp iv, c. 3° 56' N, 115° 32' E, c. 1950 m, 2 x 1967, *Burt & Martin B.5351A* (E); *ibid.*, cult. in hort. bot. reg. Edinb., vi 1972, C.7261 (E, K, L, SAR).

In the original description, the variety is separated from the species by its wider leaves and shorter flowers. However examination of the Argent and Burt specimens shows that corolla length is not a reliable character: the flower length may be as short as 2.5 cm or as long as 4 cm (5 mm longer than the maximum length given for the species by Sleumer).

There are further inconsistencies in that whereas the flower colour recorded for species and variety is scarlet, Burt's material has bright orange flowers and those of Argent's are noted as "deep salmon pink" (despite a colour photograph of the living material taken on Mulu which shows the flowers bright orange!).

Almost mature capsules on Argent's specimen, the longest measuring 20 mm, are narrowly ellipsoid.

There is a similarity between *R. nervulosum* var. *nervulosum* and *R. stenophyllum* Hook. f. (also from Borneo), in the narrow leaves and the shape and texture of the scarlet or orange-coloured flowers. This suggests that *R. stenophyllum* has a closer affinity with *R. nervulosum* of series *Javanica* than with the three New Guinea species which Sleumer (*Flora Malesiana* ser. 1, 6(4):576, 1966) allies to it by their inclusion in series *Stenophylla*.

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